

Effective Date: April 9, 1999

Directive: LAPD 5300.1

Expiration Date: April 9, 2004

Responsible Office: Office of Safety and Mission Assurance

SUBJECT: Program Assurance

1. SUMMARY

This directive sets forth policy, responsibilities, and authority for the Langley Research Center (LaRC) Program Assurance (PA) functions which include: systems safety; quality assurance; systems reliability; parts, materials, and processes; software assurance, and configuration control.

2. POLICY

This Center will plan and execute its activities to utilize practical and cost-effective measures to accomplish necessary high levels of program assurance commensurate with the research, aeronautics and space objectives.

- 3. RESPONSIBILITIES (Official/Function)
- a. General
- (1) The single point of responsibility and authority for PA activities within this Center rests with the Office of Safety and Mission Assurance (OSMA).
- (2) LAPG 5300.1 describes the PA practices which are necessary to accomplish this Center's Spaceflight Projects and Systems and is to be the basis for the development of product assurance plans. Appropriate sections can be selectively applied in consultation with Office of Mission Assurance for the effective execution of specific projects in a manner consistent with the above policy. Future LAPG's will be issued to address specific PA practices for Aeronautics Programs and Projects, Models and related research.
- b. Director, OSMA
- (1) Provide guidance and direction for Centerwide PA activities.
- (2) Ensure that the actions taken are in accordance with NASA and LaRC policies and are properly coordinated.
- (3) Evaluate and report on the effectiveness of PA activities; make recommendations for improvements in these activities; and follow up on these recommendations.

April 9, 1999 LAPD 5300.1

(4) Serve as the Center's focal point for inquiries from business firms, industry associations, Government agencies, and universities concerning PA matters.

c. Line Managers

Ensure proper application of PA requirements to activities under their supervision.

- d. Project Managers
- (1) Develop product assurance plans in concert with the Office of Safety and Facility Assurance, OSMA. Implement product assurance plans consistent with project objectives.
- (2) Coordinate PA activities with OSMA.
- (3) Ensure compliance with Centerwide policies and practices.
- 4. ORGANIZATIONAL FUNCTIONS (Organization/Functions)
- a. Office of Mission Assurance, OSMA
- (1) Plan, direct, and execute a comprehensive program to provide the PA required for this Center's programs.
- (2) Define and implement Centerwide aeronautics and space PA policy and procedures.
- (3) Plan, direct, and coordinate the application of PA methodology and analytical techniques.
- (4) Represent the Center on PA matters at conferences, symposia, and meetings sponsored by industry, Government, universities, and professional and technical societies.
- (5) Prepare and implement product assurance plans; system reliability analysis; internal and external audits, surveys, and assessments.
- (6) Provide assurance personnel for Center-related committees, panels, boards, surveys, and teams.
- b. Office of Safety and Facility Assurance, OSMA
- (1) Define and implement facility PA policy and procedures.

April 9, 1999 LAPD 5300.1

(2) Implement facility systems safety analysis and configuration management requirements for LaRC research facilities.

c. Research and Engineering Organizations

Perform responsibilities in accordance with product assurance plans, and PA policies and directives.

- 5. REFERENCES
- a. NPD 2820.1, "NASA Software Policies."
- b. NPG 5300.4 (2B-3), "Management of Government Quality Assurance Functions for NASA Contracts."
- c. LAPD 5320.6, "Implementation of NASA Standard Parts Program."
- d. LAPG 1710.15, "Wind-Tunnel Model Systems Criteria."
- e. LAPG 1740.4, "Facility System Safety Analysis and Configuration Management."
- f. LAPG 5300.1, "Space Product Assurance."
- g. LAPG 5330.9, "Langley Research Center (LaRC) Metrology Program."
- h. NASA Software Strategic Plan; dated February 15, 1995.
- 6. RECISION

LAPD 5300.1, dated September 7, 1995.

Wallace C. Sawyer Deputy Director